

REMARKS

Claims 1, 11 and 12 are amended. Claims 1-17, as amended, remain in the application with Claims 4, 8 and 13-17 withdrawn pending allowance of a generic claim. No new matter is added by the amendment to the claims.

The Rejections:

The Examiner rejected Claims 11 and 12 under 35 U.S.C. 102(b) as being anticipated by Steele U.S. Patent No. 3255807. The Examiner stated that Steele discloses a sliding door, although not a door used in an elevator installation per se, and Steele has all the structure set forth in the claims. The intended use in the preamble adds no patentable weight to the claims. Steel discloses a door used in an installation comprising: a door leaf 22 having an edge surface extending in a plane; guide elements 50, 52 extending generally perpendicular to the plane of the edge surface; and a movable belt 40 engaging the guide elements 50, 52, the movable belt having a portion adapted for contact with a guide surface 38 during sliding of the door leaf 22 relative to the guide surface 38, the guide surface 38 extending in a plane generally perpendicular to the plane of the edge surface.

Regarding Claim 12, the Examiner stated that Steele discloses another guide element 50 extending generally parallel to the plane of a door leaf 22 and the movable belt 40 being an endless belt engaging another guide element 50.

The Examiner rejected Claims 1-3, 5-7, 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Steele in view of McAulay, Jr. U.S. Patent No. 3523390.

Regarding Claim 1, Steele discloses an apparatus for guiding a door leaf 22 of a sliding door comprising: guide elements 50, 52; and a movable belt 40 engaging the guide element 50, 52, the movable belt 40 having a portion adapted for contact with a guide surface 38 associated with the door leaf 22 whereby when the guide element 50, 52 is mounted to extend generally parallel to a vertical plane of the guide surface 38, the portion of the movable belt 40 contacts the guide surface 38 during sliding of the door leaf 22 in a plane generally parallel to the plane of the guide surface 38. The Examiner commented that Steele is silent concerning the movable belt having a portion adapted for contact with a generally vertical guide surface and the guide element

is mounted to extend generally parallel to a vertical plane of the guide surface. According to the Examiner, McAulay, Jr. teaches an apparatus for guiding a door leaf of a sliding door 10 comprising: a guide element 23; and a guide surface 21, 22 associated with the door leaf 10 whereby when the guide element 23 is mounted to extend generally parallel to a vertical plane of the guide surface 21, 22, a portion of the guide element 23 contacts the guide surface 21, 22 during sliding of the door leaf 10 in a plane generally parallel to the plane of the guide surface 21, 22, and it would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the movable belt disclosed by Steele for contact with a generally vertical guide surface as taught by McAulay, Jr. and mount the guide elements disclosed by Steele generally parallel to a vertical plane of the guide surface as taught by McAulay, Jr. to facilitate the movement and guidance of the sliding door.

Regarding Claim 2, the Examiner stated that Steele discloses the guide surface 38 is disposed in a region of a door frame 30 for the door leaf 22 and the guide element 50, 52 is attached to the door leaf 22.

Regarding Claim 3, the Examiner stated that Steele discloses the guide surface 38 is disposed in the door leaf 22 and the guide element 50, 52 is attached to a region of a door frame 30 for the door leaf 22.

Regarding Claim 5, the Examiner stated that Steele discloses guide element 50, 52 is a roller rotatably attached to the door leaf 22.

Regarding Claim 6, the Examiner stated that Steele discloses the guide element holds the movable belt 40 against the guide surface 38.

Regarding Claim 7, the Examiner stated that Steele discloses movable belt 40 seals against the guide surface 38 to prevent air leakage between opposite sides of the door leaf 22.

Regarding Claim 9, the Examiner stated that Steele discloses movable belt 40 has resilient properties (rubber, column 2, line 55).

Regarding Claim 10, the Examiner stated that Steele discloses movable belt 40 has a laminated structure. The inclusion of leaf spring 58 in the belt is construed as a laminated structure.

Applicant's Response:

Applicant thanks the Panel for clarifying the Examiner's position that the Steele guide elements extend generally perpendicular to the plane of the edge surface.

Support for the amendments to the claims can be found at: Page 5, Lines 3-8; Page 9, Lines 2-4; Page 9, Lines 22-23; and Page 11, Lines 1-2.

The Examiner rejected Claims 11 and 12 under 35 U.S.C. 102(b) as being anticipated by Steele U.S. Patent No. 3255807.

Applicant amended Claim 11 to recite "at least one guide element mounted on said edge surface and having an axis of rotation extending generally perpendicular to the plane of said edge surface".

As shown in Fig. 3 of Steele, a threshold 38 extends in a generally horizontal plane contacting a portion of the track member 40, which track member 40 is in the form of a continuous loop engaging a pair of spaced end rollers 50. The end rollers 50 each have an axis of rotation that extends parallel to the surface of the threshold 38. The door 70 has a lower end surface 80 that extends in a plane parallel to (not perpendicular to as claimed by Applicant) the axis of rotation of the end roller 50. Furthermore, the end rollers 50 are mounted in a supporting web 100 that extends downwardly from the door (not mounted on the edge surface as claimed by Applicant).

Therefore, Steele does not show or suggest all of the elements of independent Claim 11.

The Examiner rejected Claims 1-3, 5-7, 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Steele in view of McAulay.

Applicant amended Claim 1 to recite "at least one guide element having an axis of rotation; and a movable belt engaging said at least one guide element, said movable belt having a portion adapted for contact with a guide surface associated with the door leaf whereby when said at least one guide element is mounted on an edge surface of the door leaf to extend generally parallel to a plane of the guide surface with said axis of rotation extending generally perpendicular to a plane of said edge surface, said portion of said movable belt contacts the guide surface during sliding of the door leaf in a plane generally parallel to the plane of the guide surface."

McAulay shows a door guide 19 for guiding a door leaf of a sliding door 10. The guide 19 includes an L-shaped bracket 25 that is fastened near the center of the door 10 at an outer surface of the door sidewall. A bearing member 23 extends downwardly from a leg of the bracket 25 between two sidewalls 21, 22 of a groove 20. The bearing member 23 has an axis of rotation that extends generally parallel to a plane each of the sidewalls 21, 22 and perpendicular to a plane of the bottom edge of the door.

Assuming for the purposes of this argument that it would have been obvious to combine Steele and McAulay, such a combination still lacks the mounting of the guide element on the edge surface of the door leaf as recited in Applicant's amended claims.

In view of the amendments to the claims and the above arguments, Applicant believes that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.